Amendments to the Specification

Please amend the paragraph at page 1, lines 5-12, in the following manner:

The present invention relates to an ultrasonic probe and an ultrasonic diagnostic apparatus and, in particular, relates to an improvement in ~~a body cavity use~~ an ultrasonic probe [[which]] that is suitable for inserting into a body cavity (hereinafter "body cavity use ultrasonic probe") and for collecting ultrasonic images of the entire circumference of 360 degrees in the body cavity and an improvement in an ultrasonic diagnostic apparatus using the same.

Please amend the paragraph bridging pages 2 and 3, in the following manner:

The insert section of the conventional ~~body cavity use~~ ultrasonic probe used for a body cavity is formed by a flexible member ~~having flexibility~~ so as to reduce a load to a subject and through deformation of the flexible shaft in accordance with deformation of the insert section, an insertion of the ultrasonic probe which is adaptable to the shape of a body cavity to be inserted was enabled.

Please amend the paragraph bridging pages 3 and 4, in the following manner:

As has been explained above, the ultrasonic probe as described in JP-A-8-56948 is constituted in such a manner that the motor rotation causes to rotate the ultrasonic transducers via the flexible shaft. For this reason, when the insert section is bent, since an irregularity in transfer torque by the flexible shaft is caused, there arose a problem that an irregularity in rotation of the ultrasonic transducers is likely caused. Namely, since the ultrasonic probe is constituted in such a manner that the stability of the scanning speed in the scanning direction of ultrasonic wave beam transmission and reception is determined by the stability of the rotation of the ultrasonic transducers via the flexible shaft, an irregularity in the ultrasonic wave beam transmission and reception is resulted in, for this reason, there arose even a tomographic image which is not required a comparatively high positional accuracy

gives a 360 degree display image in which a "positional irregularity" is caused. Particularly, in order to obtain Doppler blood flow images that require the positional accuracy of the vibrators, it is necessary to transmit and receive signals while mechanically fixing ~~correctly~~ the ultrasonic wave signal transmission and reception position ~~by~~ of the vibrators correctly (or precisely) (so as not to vary the position during the ultrasonic wave signal transmission and reception). Further, it is necessary to transmit and receive ultrasonic wave signals while changing correctly and momentary (in about 15 micro seconds) the positions of the vibrators at every timing of the ultrasonic wave signal transmission and reception. For this reason, with the conventional scheme in which the ultrasonic transducers are mechanically rotated by making use of the flexible shaft, a blood flow image displaying was difficult.

Please amend the paragraph at page 5, lines 5-21, in the following manner:

In the present invention, m pieces of vibrator elements are disposed around the entire circumference of 360 degree at a tip of an insert section of an ultrasonic probe, ultrasonic wave signals from n (n<m) pieces of ultrasonic wave transmission and reception channels in an ultrasonic diagnostic apparatus main body are transmitted and received via connection change over switches by an array of a (where it is a number of pieces of continuing vibrator elements and a≈m/8~m/2) pieces of continuing vibrator elements among the m pieces of vibrator elements, and thereby, through successively changing transmission and reception directions of the ultrasonic wave signals by successively changing over the connection change over switches, ultrasonic wave images including ultrasonic wave tomographic images and ultrasonic blood flow images along the entire 360 degree circumference of the insert section of the ultrasonic probe can be obtained.

Please amend the paragraphs at page 22, lines 7-20, in the following manner:

FIG. 6 is a view for explaining ultrasonic wave images obtained by the ultrasonic diagnostic apparatus according to embodiment 1, and, in particular, a

schematic view of an image (display field area 61) obtained when inserting the ultrasonic probe according to embodiment 1 into a gaster via an esophagus and measured an ultrasonic tomogram and a two dimensional blood flow image.

In this instant measurement, after introducing the tip portion of the insert section of the ultrasonic probe (shown in Fig. 6 at probe tip region 62) into the gaster, the gaster wall 63 of plural layer structure was observed as well as blood flow kinetics (64) flowing through blood vessels in the gaster wall was observed.

Please amend the paragraph at page 24, lines 1-14, in the following manner:

As shown in FIG. 4, a connection change over [[witch]] switch 401 according to embodiment 2 is constituted by a plurality of switching elements 201 connected in parallel so as to be connectable to one ultrasonic wave transmission and reception channel, and to each of the switching elements 201 a predetermined one vibrator element is connected. In particular, in the ultrasonic diagnostic apparatus according to embodiment 2, four switching elements 201 are arranged for one specific ultrasonic transmission and reception channel, for example, the four switching elements 201 of the first, 56th, 129th and 193rd vibrator elements are arranged to be connectable to the first ultrasonic wave transmission and reception channel.

Please amend the paragraph at page 31, lines 4-18, in the following manner:

Although in embodiments 1 and 2, an example wherein a number of vibrator elements in an array of the ultrasonic wave vibrator elements driven at a time is 64 has been explained, the arrangement of the ultrasonic wave transmission and reception channels and the connection change over switch can be modified depending on the depth of the portion of a body cavity organ desired for ~~image-taking~~ imaging, for example, when focusing the ultrasonic wave beams to a deep portion remote from the ultrasonic probe, an array of 96 pieces of vibrator elements are selected which are driven at one time, and on the contrary when focusing the ultrasonic wave beams to a shallow portion near from the ultrasonic probe, an array of 32 pieces of vibrator

elements are selected which are driven at one time.